

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in view of the following remarks is respectfully requested.

Claims 3, 4-7, 10 and 14-15 are presently active. Claims 8 and 9 were previously cancelled, and Claims 1, 2, 12, 13, and 16 have been presently canceled without prejudice or disclaimer. Claims 3 and 14 been presently amended. No new matter has been added.

In the outstanding Office Action, Claim 1 was rejected under 35 USC 112, first paragraph, for failing to comply with the written description requirement. Claim 14 was rejected under 35 USC 112, second paragraph, as being indefinite. Claims 1 and 2 were rejected under 35 USC 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0178144 to Ohmi et al in view of JP 02-55292 to Maruyama and in view of U.S. Patent No. 5,997,956 to Hunt et al. Claims 3-6, and 10 were rejected under 35 USC 103(a) as being unpatentable over Ohmi et al in view of Maruyama and Hunt et al and U.S. Patent Publication No. 2003/0126872 to Harano et al. Claim 7 was rejected under 35 USC 103(a) as being unpatentable over Ohmi et al in view of Maruyama and Hunt et al and Harano et al and U.S. Patent No. 5,660,047 to Paganessi. Claim 12 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmi et al in view of Maruyama and Hunt et al and further in view of U.S. Patent Publication No. 2003/0121608 to Chen et al. Claims 13 and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmi et al in view of Petvai et al, Hampden-Smith et al, and Chen et al, and further in view of U.S. Patent Application Publication No. 2002/0069968 to Keller.

Regarding the 35 USC 112, first paragraph, rejection, Claim 1 was canceled.

Regarding the 35 USC 112, second paragraph, rejection, Claim 14 has been amended to address the issue identified in the Office Action.

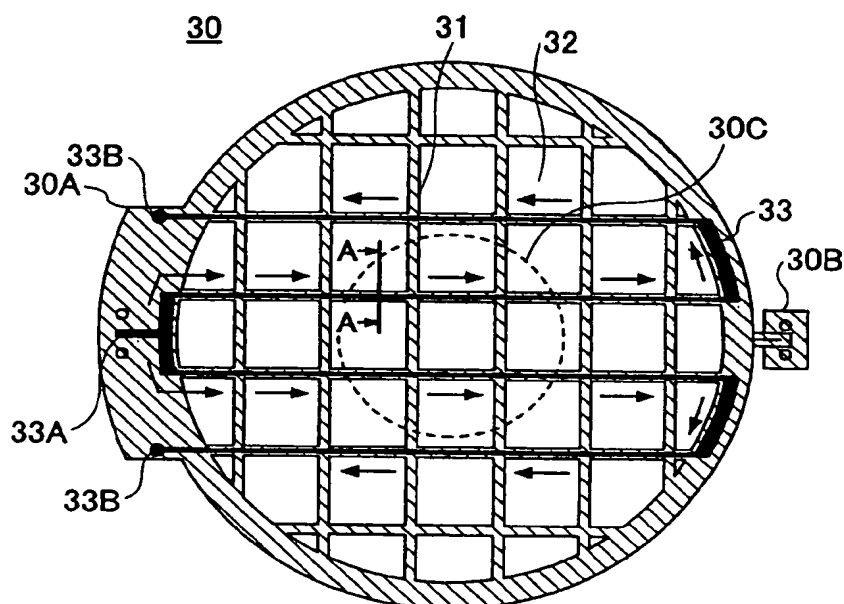
Claim 3 as clarified defines:

3. A plasma processor, comprising:
a processing vessel having a holder holding a substrate to be processed;
a microwave antenna provided on the processing vessel so as to oppose the substrate to be processed;
a processing gas supply part provided between the substrate to be processed on the holder and the microwave antenna so as to oppose the substrate to be processed,
a lattice-like gas diffusion part including a vertical linear part and a horizontal linear part,
a plurality of first openings through which plasma formed in the processing vessel passes, **the first openings formed between the vertical linear part and the horizontal linear part of the gas diffusion part,**
a process gas channel formed in the vertical linear part and the horizontal linear part of the gas diffusion part and connectable to a process gas source,
a plurality of second openings communicating with the process gas channel, and
a cooling medium channel through which a cooling medium cooling the process gas supply part flows, **the cooling medium channel being formed in one of the vertical linear part and the horizontal linear part of the gas diffusion part so that the cooling medium flows only in the one of the vertical linear part and the horizontal linear part in the gas diffusion part;**
and
a cooling medium circulator connected to the cooling medium channel and configured to circulate the cooling medium,
wherein the cooling medium includes a cooling gas and mist of H₂O,
and
a pressure of the cooling medium channel is 0.2 to 1 MPa. [Emphasis added.]

The amendments to Claim 3 find support at, for example, Figs. 2, 4A, and 4B and paragraphs [0043] and [0048] of Applicants' filed specification.

Applicants' Figure 4B is reproduced below for the convenience of the Examiner illustrating a non-limiting embodiment where the cooling medium channel being formed in one of the vertical linear part and the horizontal linear part of the gas diffusion part so that the cooling medium flows only in the one of the vertical linear part and the horizontal linear part in the gas diffusion part.

FIG.4B



Indeed, according to the emphasized features noted above of Claim 3, the cooling medium flows only in one of the vertical linear part and the horizontal linear part in the gas diffusion part. That is, since the cooling medium includes a cooling gas and mist and the pressure of the cooling medium channel is 0.2 to 1 MPa, it is possible to cool the process gas supply part sufficiently (to, for example, approximately 100°C to 200°C) without causing the cooling medium to flow through a complicated channel.

Under the recent guidelines regarding *KSR* published in Federal Register vol. 75, No. 169 (September 1, 2010), Example 4.1 indicates that:

Even where a general method that could have been applied to make the claimed product was known and within the level of skill of the ordinary artisan, the claim may nevertheless be nonobvious if the problem which had suggested use of the method had been previously unknown.

* * *

The Federal Circuit affirmed the district court's decision that the claimed invention was not obvious. Even though subcoatings for enteric drug

formulation were known, and there was no evidence of undue technical hurdles or lack of a reasonable expectation of success, the formulation was nevertheless not obvious because the flaws in the prior art formulation that had prompted the modification had not been recognized. Thus there would have been no reason to modify the initial formulation, even though the modification could have been done. Moreover, a person of skill in the art likely would have chosen a different modification even if he or she had recognized the problem.

Hence, Applicants submit that the presence of all claim elements is **not** found in the applied art, as the cited references in the outstanding Office Action, taken alone or in combination, fail to teach or suggest the emphasized features noted above in Claim 3.

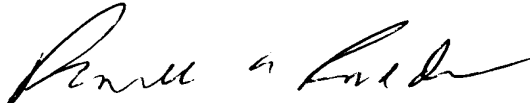
Moreover, even if the Examiner were to take a position that the applied art could be modified, Applicants' results above for the claimed combination show that the claims would not have been obvious because, with no awareness of the problem (i.e., to cool the process gas supply part sufficiently without causing the cooling medium to flow through a complicated channel) or its solution, a person of skill in the art at the time of the invention (with no awareness of the invention and no impermissible hindsight gained from Applicants' teachings) likely would have chosen a different modification.

Accordingly, given these considerations now brought to the Examiner's attention regarding the deficiencies in the art, it is respectfully requested that Claims 3, 4-7, 10 and 14-15 be found non-obvious and be passed to allowance. In any other case, Applicants request that the Office's findings and conclusions be clearly communicated so that Applicants can decide if further clarifications of their invention or if an appeal is in order.

In view of the foregoing, no further issues are believed to remain. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.

A handwritten signature in dark ink, appearing to read "Steven P. Weihrouch", is written over a horizontal line.

Steven P. Weihrouch
Attorney of Record
Registration No. 32,829

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)

Ronald A. Rudder, Ph.D.
Registration No. 45,618